ABSTRACT

The present invention leverages high-frequency interrupts *and/or* low priority threads to accurately determine which computing resources are available. This provides a computing asset (CPUs *and/or* software applications) with a means to accurately compensate for resource utilization in order to increase its performance. By utilizing the present invention, the computing asset can optimize its performance in a real-time, self-tuning manner. In one instance of the present invention, high intensity, low priority threads are initiated on available CPUs (logical *and/or* physical) to effectively replace a CPU's idle time with the low priority thread. This thread generally constitutes a computationally-intensive *and/or* a memory-intensive thread which permits a highly accurate performance measurement to be obtained for available CPU resources. In another instance of the present invention, high-frequency interrupts are initiated on CPUs to compensate for processes that are shorter than a thread's time quantum, providing a more accurate performance counter.